

ABSTRACT

Devices with lateral flow elements and integral fluidics are disclosed. The integral fluidics consist of injector pumps comprised of fluidic elements under instrument control. The fluidic element of an injector pump is fluidically connected to lateral flow elements and can be used to control fluid entry into containment chambers referred to as micro-reactors. The lateral flow elements comprise conductor elements that can be used for sample application and transport of analyte contained in the sample to the micro-reactor. Fluidic transport through the fluidic element of the injector pump is under instrument-control. Both the lateral flow element and the fluidic element may contain chemical entities incorporated along their length. The chemical reactions that can be used for analyte detection using the devices are described. Also described are methods of manufacture of these devices.